LISTING OF CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

1. (previously presented): A method for cleaning a semiconductor wafer, comprising:

plasma etching a feature into a low K dielectric layer having a photoresist mask, the plasma etching generating etch residues;

ashing the semiconductor wafer to remove the photoresist mask, the ashing generating ashing residues; and

removing the etching residues and the ashing residues from the low K dielectric layer having the plasma etched feature, the removing being enhanced by scrubbing the low K dielectric layer of the semiconductor wafer with a wet brush that applies a fluid mixture including a cleaning chemistry and a wetting agent.

2. (original): A method for cleaning a semiconductor wafer as recited in claim 1, wherein the wetting agent is a surfactant and the cleaning chemistry includes a combination of NH_4OH, H_2O_2, and deionized (DI) water.

3. (original): A method for cleaning a semiconductor wafer as recited in claim 2, wherein the surfactant is selected from a group comprising fluorosurfactants and hydrocarbon surfactants.

4. (original): A method for cleaning a semiconductor wafer as recited in claim 3, wherein the surfactant has a concentration between about 0.005 percent by weight to about 0.1 percent by weight.

5. (original): A method for cleaning a semiconductor wafer as recited in claim 3, wherein the surfactant has a concentration of about 0.01 percent by weight.

6. (original): A method for cleaning a semiconductor wafer as recited in claim 2, wherein the combination ratio of NH_4OH, H_2O_2, and DI water is between about 1:4:10 and about 1:4:30.

7. (original): A method for cleaning a semiconductor wafer as recited in claim 6, wherein the combination ratio of NH_4OH, H_2O_2, and DI water is about 1:4:20.

8. (original): A method for cleaning a semiconductor wafer as recited in claim 1, further comprising:

scrubbing the low K dielectric layer using the brush while applying deionized (DI) water after removing the etching residues and the ashing residues.

9. (previously presented): A method for cleaning a semiconductor wafer, comprising:

plasma etching a feature into a low K dielectric layer, the plasma etching generating etch residues in and around the feature;

subjecting the semiconductor wafer to an ashing operation, the ashing operation generating ashing residues; and

scrubbing the low K dielectric layer having the plasma etched feature, using a mixture fluid including a cleaning chemistry and a wetting agent, the wetting agent being configured to condition the low K dielectric layer to facilitate cleaning of the etch residues and the ashing residues with the cleaning chemistry.

10. (original): A method for cleaning a semiconductor wafer as recited in claim 9, further comprising:

scrubbing the low K dielectric layer using the brush while applying deionized (DI) water after removing the etching residues and the ashing residues.

11. (original): A method for cleaning a semiconductor wafer as recited in claim 9, wherein the wetting agent is a surfactant and the cleaning chemistry includes a combination of NH_4OH , H_2O_2, and deionized (DI) water.

12. (original): A method for cleaning a semiconductor wafer as recited in claim 11, wherein the surfactant is selected from a group comprising fluorinated surfactants and hydrocarbon surfactants.

13. (original): A method for cleaning a semiconductor wafer as recited in claim 11, wherein the surfactant has a concentration between about 0.005 percent by weight to about 0.1 percent by weight.

14. (original): A method for cleaning a semiconductor wafer as recited in claim 11, wherein the surfactant has a concentration of about 0.01 percent by weight.

15. (original): A method for cleaning a semiconductor wafer as recited in claim 11, wherein the combination ratio of NH_4OH, H_2O_2, and DI water is between about 1:4:10 and about 1:4:30.

16. (original): A method for cleaning a semiconductor wafer as recited in claim 11, wherein the combination ratio of NH_4OH , H_2O_2, and DI water is about 1:4:20.

17. (currently amended): A method for cleaning a semiconductor wafer, comprising:

plasma etching a feature into a low K dielectric layer, the plasma etching generating etch residues in and around the feature;

subjecting the semiconductor wafer to an ashing operation, the ashing operation generating ashing residues; ~~and~~

scrubbing the low K dielectric layer having the plasma etched feature, using a mixture fluid including a cleaning chemistry and a wetting agent, the wetting agent being configured to condition the low K dielectric layer to facilitate cleaning of the etch residues and the ashing residues with the cleaning chemistry; and

scrubbing the low K dielectric layer having the plasma etched feature, using the brush while applying deionized (DI) water after removing the etching residues and the ashing residues.

18. (original): A method for cleaning a semiconductor wafer as recited in claim 17, wherein the wetting agent is a surfactant and the cleaning chemistry includes a combination of NH_4OH, H_2O_2, and deionized (DI) water.

19. (original): A method for cleaning a semiconductor wafer as recited in claim 17, wherein the surfactant is selected from a group comprising fluorinated surfactants and hydrocarbon surfactants.

20. (original): A method for cleaning a semiconductor wafer as recited in claim 18, wherein the surfactant has a concentration between about 0.005 percent by weight to about 0.1 percent by weight.

21. (original): A method for cleaning a semiconductor wafer as recited in claim 18, wherein the surfactant has a concentration of about 0.01 percent by weight.

22. (original): A method for cleaning a semiconductor wafer as recited in claim 18, wherein the combination ratio of NH_4OH, H_2O_2, and DI water is between about 1:4:10 and about 1:4:30.

23. (original): A method for cleaning a semiconductor wafer as recited in claim 18, wherein the combination ratio of NH_4OH, H_2O_2, and DI water is about 1:4:20.

24. (currently amended): A method for cleaning a semiconductor wafer, comprising:

plasma etching a feature into a low K dielectric layer, the plasma etching generating etch residues in and around the feature;

subjecting the semiconductor wafer to an ashing operation, the ashing operation generating ashing residues; ~~and~~

scrubbing the low K dielectric layer having the plasma etched feature, using a mixture fluid including a cleaning chemistry and a wetting agent, the wetting agent being configured to condition the low K dielectric layer to facilitate cleaning of the etch residues and the ashing residues with the cleaning chemistry, the wetting agent being a surfactant and the cleaning chemistry being a standard clean-1 (SC-1) solution including a combination of NH_4OH , H_2O_2, and deionized (DI) water, the surfactant having a concentration between about 0.005 percent by weight to about 0.1 percent by weight, combination ratio of NH_4OH , H_2O_2, and DI water being between about 1:4:10 and about 1:4:30; and

scrubbing the low K dielectric layer having the plasma etched feature, using the brush while applying deionized (DI) water after removing the etching residues and the ashing residues.